

CLAIMS

I claim:

1. A method of diagnosing the presence or absence of cancer in a human patient comprising the steps of:

a) examining patient tissue for the CRD-BP expression level; and

5 b) comparing the result of step (a) with the expression level in non-cancerous tissue from the same source, wherein an increased CRD-BP level in the patient tissue compared to the non-cancerous tissue is diagnostic of cancer.

2. The method of claim 1 wherein the detection of CRD-BP comprises the step of homogenizing biopsy tissue and obtaining a crude protein extract and examining that extract for the CRD-BP level.

3. The method of claim 2 wherein the detection is via a two antibody sandwich assay.

4. The method of claim 2 wherein the detection is via antigen competition assay.

5. The method of claim 3 wherein the detection is via antibody capture assay.

6. The method of claim 2 wherein the detection of CRD-BP is via immunoblotting.

7. The method of claim 1 wherein the detection of CRD-BP takes place in cells via immunological or *in situ* hybridization methods.

8. The method of claim 1 wherein the cancer is selected from the group consisting of breast cancer, colon cancer and pancreatic cancer.

9. The method of claim 1 wherein the patient tissue is breast tissue.

10. The method of claim 9 wherein the non-cancerous tissue is breast tissue.

11. The method of claim 1 wherein the patient tissue is colon tissue.

12. The method of claim 11 wherein the non-cancerous tissue is colon tissue.

13. The method of claim 1 wherein the tissue is pancreatic tissue.

14. The method of claim 13 wherein the non-cancerous tissue is pancreatic tissue.

15. A method of determining the stage of cancer in a human patient comprising the step of:

a) examining patient tissues for the CRD-BP expression levels, and

5 b) correlating that expression level with disease prognosis.

16. A method of determining the presence or absence of anti-CRD-BP antibody in a patient's serum comprising the step of:

a) exposing a patient's serum to CRD-BP and
5 determining whether an anti-CRD-BP antibody is present.

17. A method of determining the presence or absence of CRD-BP itself in a patient's serum comprising the step of:

a) exposing a patient's serum to CRD-BP
5 antibody and determining whether the CRD-BP is present.

18. A method of inhibiting cancer cell growth comprising the step of eliminating or lowering the level of CRD-BP in the cancerous cells.

19. The method of claim 18 wherein ability of the CRD-BP to protect c-myc mRNA from rapid destruction is by providing the cell with a competitor RNA.

20. The method of claim 18 wherein the ability of the CRD-BP to protect c-myc mRNA from rapid destruction is reduced or eliminated via the use of an inhibitor that blocks CRD-BP binding to the *c-myc* mRNA CRD.